

REMARKS

Reconsideration of the application in view of the above amendments and the following remarks is respectfully requested.

I. Status of the Claims

Claims 1-7, 16-21, 24-35, 40-47, 50-52, 54-69, 73-87, 108-141 and 152-164 are pending in this application. In the Office Action mailed on September 7, 2005, claims 152-157 were restricted as being drawn to a distinct invention and are withdrawn, as stated below. Claims 1-7, 16-21, 24-35, 40-47, 50-52, 54-69, 73-87, 108-129, 131, 138-141 and 152-164 were rejected and claims 130, 132-137 and 142-151 were objected to as being dependent on a rejected base claim.

Claims 1, 3, 29, 58, 65, 68-69, 73, 118, 120-121, 124-125, 127-129, 131, 139, 151, 158 and 161 are currently amended. Claims 2, 8-15, 22, 23, 32-57, 66-67, 70-72, 76-117, 119, 122-123 and 138 have been cancelled. Claims 1, 3-7, 16-21, 24-31, 58-65, 68-69, 73-75, 118, 120-121, 124-137, 139-151 and 158-164 remain under prosecution.

II. Rejections Under 35 U.S.C. § 102

The Examiner rejected claims 1, 6, 21, 24, 25, 158, 159 and 160 under 35 U.S.C. § 102 as being anticipated by Moslehi, United States Patent No. 6,051,113. Regarding claim 1, the Examiner states that Moslehi teaches the use of a plasma generator for plasma cleaning the specimen and a means for coating within a single process chamber.

III. Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 2-5, 7, 32, 22, 24, 25, 45, 46 and 47 under 35 U.S.C. § 103(a) as being obvious over Moslehi in view of Siebert, United States Patent No. 4,858,556. The Examiner further rejected claim 16 over Moslehi in view of Ameen, et al., United States Patent No. 6,143,128; claims 17-20 over Moslehi in view of Chang, et al., United States Patent No. 6,434,814; claims 26-28 over Moslehi in view of Mitro, et al., United States Patent No. 5,922,179; claim 29 over Moslehi in view of Siebert and Mitro; claim 30 over Moslehi in view of Kobayashi, et al., United States Patent No. 5,340,460; claim 31 over Moslehi in view of Holland, United States Patent No. 5,311,725; claim 40 over Moslehi in view of Siebert and Ameen; claims 41-44 over Moslehi in view of Siebert, Ameen and Chang; claims 50-52 over Moslehi in view of Siebert and Mitro; claim 54 over Moslehi in view of Siebert and Kobayashi; claims 55-64, 66 and 76 over Mahler, United States Patent No. 4,595,483 in view of Moslehi; claims 65 and 77 over Mahler in view of Moslehi and Ameen; claims 78-81 over Mahler in view of Moslehi, Ameen and Chang; claims 67-69, 73, 74 and 82 over Mahler in view of Moslehi and Siebert; claim 83 over Mahler in view of Moslehi, Siebert and Ameen; claims 84-87 over Mahler in view of Moslehi, Siebert, Ameen and Chang; claim 75 over Mahler in view of Moslehi, Siebert and Mitro; claims 108, 109, 116, 117, 119, 121-124, 129, 131, 138, 139, 140 and 141 over Mahler in view of Siebert and Moslehi; claims 110 and 111 over Mahler in view of Siebert, Moslehi and Ameen; claims 112-115, 120, 125-128 over Mahler in view of Siebert, Moslehi, Ameen and Chang; claim 118 over Mahler in view of Siebert, Moslehi and Nomura, et al., United States Patent No. 6,641,703 and claims 161-164 over Moslehi in view of Baldwin, et al., United States Patent No. 6,419,802.

It is clear from the tortured and piecemeal application of these various references, in certain cases **four** references for a single rejection, that the Examiner has engaged in a certain amount of inappropriate hindsight reconstruction.

Applicants have, however, amended claim 1 to include the subject matter of claims 2 and 55, now requiring plasma cleaning, removing material, coating and plasma etching of a specimen to occur in a single process chamber under continuous vacuum conditions. All of the remaining claims except 158-164 now depend from this claim 1. Applicants' claims 2 and 55 were previously rejected over Moslehi, Siebert and Mahler. None of these references teaches or suggests the combination of all four functions in a single process chamber. Nor would it be proper to combine all of these references to find such a combination without impermissible hindsight reconstruction. Each of the references teaches a certain combination of functionalities, such as cleaning or coating. All of the other non-included functionalities were well known to those skilled in the art at the time of the invention of each of the references. None of the references contains any specific teaching or suggestion to add additional functionality as each is directed toward solving a particular combination of needs in the art and each focuses solely on the solution of the particular problem being addressed. This includes the need to clean a specimen prior to coating or to etch a surface prior to coating the same surface with another material.

With respect to claims 158-164, the Examiner has rejected claims 158-160 as anticipated by Moslehi and 161-164 as obvious over Moslehi in view of Baldwin. With respect to claim 158, the Examiner states that the sample stage of Moslehi may be located at any point in three dimensions within the chamber. Applicants have amended the claim to require that the stage must not only be movable to any three dimensional point, but at an angle relative to a beam


impinging on the surface of the specimen. Moslehi's stage moves only up and down and in a circular manner and is not capable of tilting relative to the incident beam. Claim 161 has been amended to include a similar limitation which distinguishes it from Moslehi and Baldwin. Claims 159-160 and 162-164 are dependent upon claims 158 and 161 and contain the same limitations.

CONCLUSION

Based on the foregoing remarks, Applicants respectfully submit that claims 1, 3-7, 16-21, 24-31, 58-65, 68-69, 73-75, 118, 120-121, 124-137, 139-151 and 158-164 are in condition for allowance.

Respectfully submitted,

MEIZ LEWIS LLC

By 
Barry I. Friedman, Reg. No. 33,695
11 Stanwix Street, 18th Floor
Pittsburgh, Pennsylvania 15222

Attorneys for Applicants

(412) 918-1100